## TABLE 1

Chromosome Location 5q31.1 2q33-34 10q26 14q22.1 4p16.3 10q26 11q13	OMIM - SH3 DOMAIN, GRB2-LIKE, 2; SH3GL2 OMIM - REGULATOR OF G PROTEIN SIGNALING 20; RGS20 OMIM - REGULATOR OF G PROTEIN SIGNALING 20; RGS20 OMIM - RAL GUANINE NUCLEOTIDE DISSOCIATION STIMULATOR; RALGDS OMIM - INOSITOL 1,4,5. TRIPHOSPHATE RECEPTOR, TYPE 1; ITPR1 OMIM - INOSITOL 1,4,5. TRIPHOSPHATE RECEPTOR, TYPE 1; ITPR1 ALPHA; PPP2R1A OMIM - FIBROBLAST GROWTH FACTOR 2; FGF2 OMIM - FIBROBLAST GROWTH FACTOR 2; FGF2 OMIM - MITOGEN-ACTIVATED PROTEIN KINASE KINASE 1; MAP2K1 OMIM - MITOGEN-ACTIVATED PROTEIN 1; RAP1GA1
OMIM EGR1 IGFBP5 K-Sam-III Mig-2 FGFR3 FGFR2 NUMA U4	OMIM - SH3 DOM/OMIM - REGULATOMIM - RAL GUANOMIM - FIBROBLA OMIM - INOSITOLOMIM - FIBROBLA OMIM - FIBROBLA OMIM - MITOGEN OMIM - MITOGEN OMIM - MITOGEN OMIM - RAP1, GT
DLPFC-MDD Gene Description Gene Description Early growth response protein 1 (EGR1) human Insulin-like growth factor binding protein 5 (IGFBP5) Fibroblast growth factor receptor k-sam, Splice 3 (k-sam-III) H sapiens Mitogen-inducible gene (mig-2) human Novel growth factor receptor (FGF R3) human Keratinocyte growth factor receptor (FGF R3) nuclear mitotic apparatus protein 1, Alt. Splice Form 2 (NuMA Clone U4) human Proliferation-associated gene (PA GA)	DLPFC-MDD Gene Description Gene Description  SH3-domain GRB2-like 2 regulator of G-protein signalling 20 ras association (RalGDS/AF-6) domain containing protein JC265 fibroblast growth factor 9 (glia-activating factor) inositol 1,4,5-triphosphate receptor, type 1 protein phosphatase 2 (formerly 2A), regulatory subunit A (PR 65), alpha isoform fibroblast growth factor 2 (basic) mitogen-activated protein kinase thase 1 RAP1, GTPase activating protein 1
GenBank Accession# NM1964 NM599 M87771 Z24725 M64347 M80634 Z14228	GenBank Accession # AF036268 AF060877 AL049538 D14838 D26070 J02902 L05624 M64788

OMIM - FIBROBLAST GROWTH FACTOR RECEPTOR 2, FGFR2	OMIM - GROWTH FACTOR RECEPTOR-BOUND PROTEIN 2; GRB2 OMIM - MITOGEN-ACTIVATED PROTEIN KINASE 9; MAPK9 OMIM - p21/CDC42/RAC1-ACTIVATED KINASE 1; PAK1	OMIM - NEUROTROPHIC TYROSINE KINASE, RECEPTOR, TYPE 2, NTRK2	OMIM - PROTEIN KINASE C, BETA-1; PRKCB1 OMIM - INOSITOL 1,4,5-TRISPHOSPHATE 3-KINASE A; ITPKA OMIM - FIBROBLAST GROWTH FACTOR RECEPTOR 2; FGFR2					
O(	Ololoi	Ol	GIGIO!	Symbol	RAB33A PTPRK	ABL1	FOS JUNB KIAA0806 RAP1GA1	CHN2
fibroblast growth factor receptor 2 (bacteri	a-expressed kinase, keralitocyte grown actor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) growth factor receptor-bound protein 2 mitogen-activated protein kinase 9	transcriptional activator of the c-fos promo ter Cluster Incl. W28432:47f2 Homo sapiens	cUNA (gb=wvzo+sz /gi-1505) (cc) (cc) (cc) (cc) (cc) (cc) (cc) (c	Anteg BP Description	RAB33A, member RAS oncogene family protein tyrosine phosphatase, receptor typ	e, K M14752 HUMABLA Human c-abl gene  G enBank==M14752		-
M87771	M96995 U09759	U24152 U49857 W28432	X07109 X54938 Z71929	GenBank	Accessi n# NM_004794 NM_002844	_ M14752	NM_005252 NM_002229 NM_014813	AB007943 NM_004067

DEGS	GRIK1 NDN	RGR	TUBA1	AMD1	SLC2A3	חמממ	NRCAM	GNAZ	1 1000			(	GABKAS	DDD1R3C		COX5B		GKM3	10.1	ו פפר	NCAM1	AP1S2	<u>.</u>	EFNB3	BMP6	CDKL1			
degenerative spermatocyte homolog, lipid desaturase (Drosophila)	glutamate receptor, ionotropic, kainate 1	retinal G protein coupled receptor	dystrobrevin, alpha	tubulin, alpha 1 (testis specific)	solute carrier family 2 (facilitated glucose t	ransporter), member 3	phosphoserine phosphatase-like	neuronal cell adriesion increasion (G prot cuanine nucleotide binding protein (G prot	ein), alpha z polypeptide	L24123:Homo sapiens NRF1 protein (NK e1) mRNA (rds=LINKNOWN /qb=L24123	/gi=438646 /ug=Hs.83469 /len=4992  Gen	Bank==L24123	gamma-aminobutyric acid (GABA) A rece	ptor, alpha 5	protein phosphatase 1, regulatory ("""")	r) subunit 3C A1526089:DU3.2-7.H07.r Homo sapiens c	DNA  GenBank==AI526089	glutamate receptor, metabotropic 3	ras-like protein TC10	integrin, beta-like 1 (with EGF-like repeat	domains)	neural cell adnesion molecule i	adaptor-related protein complex 1, signia	2 subunit	eprini-63	VER358 Cds#2 HSSTHPKB H.sapiens mR	NA KKIALRE for serine/threonine protein	kinase  GenBank==X66358	-
NM_003676	NM_000830	NM_00246/ NM_002921	NM_001390		NM_001634 NM_006931		NM_003832	NM_005010		L24123			NM 000810	<b>!</b>	NM_005398	08030314	A1320003	NM 000840	NM_012249	NM_004791	1	NM_000615	NM_003916		NM_001406	OL YOU MN	Yeesoo		

ACTG2 BAX	RAC1	MAP2 PSPHL PHKB OKFZp547	1014 CREB1	NCALD MINK CSPG5	NEFL PRKACA	CDK5R1	
DLPC-BP actin, gamma'2, smooth muscle, enteric U19599 HSU19599 Human (BAX delta) m	RNA  GenBank==U19599 ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Ra	c1) microtubule-associated protein 2 phosphoserine phosphatase-like phosphorylase kinase, beta	hypothetical protein DNF 2P341014 CAMP responsive element binding protein	1 neurocalcin delta Misshapen/NIK-related kinase Homo sapiens cDNA FLJ37320 fis, clone	BRAMY2018106 neurofilament, light polypeptide 68kDa protein kinase, cAMP-dependent, catalytic	, alpha cyclin-dependent kinase 5, regulatory sub	Secretory granule, neuroendocrine protein 1 (SGNE1)(7B2 protein) located at chrom osome band 15q13
D00654 U19599	806900 WN	NM_002374 AJ001612 NM_000293	NM_020217 NM_004379	NM_032041 NM_015716 AF059274	NM_006158 NM_002730	- NM_003885	NM_003020

## TABLE 2

fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon s fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon s Cluster Incl. W28432:47f2 Homo sapiens cDNA /gb=W28432 /gi=1308443 /ug=Hs.92030 /len=921 protein phosphatase 2 (formerly 2A), regulatory subunit A (PR 65), alpha isoform AB007943:Homo sapiens mRNA for KIAA0474 protein |GenBank==AB007943 Nuclear mitotic apparatus protein 1, Alt. Splice Form 2 (NuMA Clone U4) ras association (RalGDS/AF-6) domain containing protein JC265 p21/Cdc42/Rac1-activated kinase 1 (STE20 homolog, yeast) M14752 HUMABLA Human c-abl gene |GenBank==M14752 human Insulin-like growth factor binding protein 5 (IGFBP5) Fibroblast growth factor receptor k-sam, Splice 3 (k-sam-III) v-fos FBJ murine osteosarcoma viral oncogene homolog yndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) yndrome, Pfeiffer syndrome, Jackson-Weiss syndrome) human Keratindcyte growth factor receptor (FGFR2) orotein tyrosine phosphatase, receptor type, K fibroblast growth factor 9 (glia-activating factor) human Proliferation-associated gene (PAGA) transcriptional activator of the c-fos promoter numan Novel growth factor receptor (FGFR3) inositol 1,4,5-triphosphate receptor, type 1 mitogen-activated protein kinase kinase 1 RAB33A, member RAS oncogene family H sapiens Mitogen-inducible gene (mig-2) Early growth response protein 1 (EGR1) growth factor receptor-bound protein 2 mitogen-activated protein kinase 9 regulator of G-protein signalling 20 fibroblast growth factor 2 (basic) SH3-domain GRB2-like 2 KIAA0806 gene product protein kinase C, beta 1 un B proto-oncogene NM\_002229 NM\_014813 NM\_005252 NM 004794 NM 002844 AF036268 AL049538 AF060877 M14752 M96995 **Z71929 U09759 U49857** W28432 D14838 **U24152** X07109 X54938 M64347 M80634 **D26070** M87771 X67951 104513 **J64788 JM1964** 214228 \_05624 102902 M87771 224725 4M599

## Tabl 2, cand or

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L24123:Homo sapiens NŘF1 protein (NRF1) mRNA /cds=UNKNOWN /gb=L24123 /gi=438646 /ug=Hs.83469 /len=4992 |GenBank==L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    X66358 cds#2 HSSTHPKB H.sapiens mRNA KKIALRE for serine/threonine protein kinase |GenBank==X66358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1)
                                                                                                                                                                                                                                                                                                                                      AI526089:DU3.2-7.H07.r Homo sapiens cDNA |GenBank==AI526089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U19599 HSU19599 Human (BAX delta) mRNA |GenBank==U19599
                                                                                                                                                                                                                            guanine nucleotide binding protein (G protein), alpha z polypeptide
          degenerative spermatocyte homolog, lipid desaturase (Drosophila)
                                                                                                                                                             solute carrier family 2 (facilitated glucose transporter), member 3
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                                                                                                                                             S-adenosylmethionine decarboxylase 1
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NM\_002730 protein kinase, cAMP-dependent, catalytic, alpha NM\_003885 cyclin-dependent kinase 5, regulatory subunit 1 (p35)

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060990	carboxypeptidase D	
	fatty acid binding protein 7, brain	BP DLPFC
Z96Z00LA	chondroitin sulfate proteoglycan 3 (neurocan)	
7429207A		
0 <del>1</del> 2740	nuclear receptor subfamily 4, group A, member 1	
89493X	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypeptide	
D44466	proteasome (prosome, macropain) 26S subunit, non-ATPase, 1	
6809S3IA	cytochrome c oxidase subunit Vb	
X03484	v-raf-1 murine leukemia viral oncogene homolog 1	
		Bn An 98
14740X	πρίσμιτη carboxyl-terminal esterase L1 (ubiquitin thiolesterase)	
X05236	sldolase A, fructose-bisphosphate	
M20470	clathrin, light polypeptide (Lcb)	
DS6443	solute carrier family 1 (glial high affinity glutamate transporter), member 3	
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X12331	phosphoribosyl pyrophosphate synthetase 1	•
78067X	zinc finger protein 36, C3H type-like 1	
71005X	NEC-like 1 (chicken)	
24870SIA	prostaglandin D2 synthase (21kD, brain)	
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Table 4: Summary

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	L27476	AB028950	AI688299	R16035	U81006	M92383	D38305	D13641	U09477	M12125	M12125	U12595	X00437	AB011089	AF084260	AJ133769	99068X	AF042181	AF001294	AF035283	95690X	95690X	AF005392	X01703	AF035316	X02344	U47634	X00734	S75463	D17517	U18934	AI310002	AF075599	U67122	X04741	U27460	1130930

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J00153	AL049423	AF052148	AL022101	AL118582	AI095508	W28612	AL049378	AI700633	AF070536	AF052119	AL080113	AL049265	AL049390	AF070577	AI827895	77956X	AL080093	AL049969	AF052141	L27560	W27522	AL022718	AJ005694	AL120687	AL046322	AW043812	H12054	AC003007	J03071	M57417	M33764	M58028	X74262	U19796	U22028	

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M55914	M21154	M10905	U33429	AB014539	X63432	X56841	X00067	AF007140	X13839	AF023268	AF053356	U37122	AB000450	AI126004	AF002668	X54304	U57843	X02344	X04098	U96074	D32053	U59632	X14346	Z98046	AL096737	AB014598	U17886	AI986201	AL080181	AB014514	R92331	U24183	D00860	U09510	AI635895	U66033

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Table 5: RT-PCR Confirmation

Gene Bank Acc. No.	Gene Name	AnCe BP	AnCg MD	DLPFC BP	DLPFC MD
AB020629	ABCA8				uwop
U37122	· ADD3				down
X63575	ATP2B2			down	
X71490	ATP6V0D1		dn		
62899N	BAD	uwop			
J04046	CALM3			ďn	
AF112471	CAMK2B		dn		
D50310	CCNI	dn ,			
AL080061	CLIC4				down
S74445	CRABP1		dn		dn
U37143	CYP2J2	1	down		down
M34309	ERBB3				down
M80634	FGFR2				down
M64347	FGFR3				down
L08485	GABRAS	dn			
AF016917	GABRD	имор	•	down	
AC004131	GPRC5B		down		down
AB006626	HDAC4		ďn		
L19182	IGFBP7	down		down	
X57206	ITPKB				down
X77196	LAMP2				down
M29273	MAG		фомп		down
X76220	MAL		down		имор
Z24725	MIG2				фомп
AB018342	MY010				имор
M12267	OAT		down		фомп
Y10275	PSPH				down
AJ001612	PSPHL	down		фомп	
AB007943	RAP1GA1				имор
AF060877	RGS20		фомп		down
AL049538	RIN2				фор
AB018305	SPON1		down		фомп
U58334	TP53BP2	-	down		фомп
U28964	YWHAZ	dn			

Table 6: Summary of Anti-Depressant Treatment Data

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Genbank	Gene Name	AHNAK	ALDH1A1	AP2S1	AQP4	ARC	ARFD1	ARPC4	ATP1A2	ATP1A3	ATP2B1	ATP2C1	ATP6V1D	AUH	BIN1	BIN1	BTG2	C1D	CACNA2D1	CALB1	CAMK2B	CAP2	CART	CDK5	CHGA	CHN2	CNK2	CNN3	CRABP1	CRABP1	CREB1	CSRP1	DNC11	DYRK1A	
Genbank	Accession No.	66808W	K03000	X97074	U34846	D87468	L04510	AF006087	105096	M37457	J04027	AJ010953	AA877795	X79888	AF001383	U68485	U72649	X95592	M76559	AF068862	AF112471	U02390	U20325	X66364	U03749	U07223	AB020709	S80562	S74445	S74445	M27691	M33146	AI810807	D86550	

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HSPA9B	dn				
HSPE1	down				uwop
HTR2A	down				
IGSF4	dn				
INSIG1	uwop				
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NME1	NME1	NME2	NMT1	NPTX1	ΝΡΥ	NRCAM	NRCAM	NRCAM	NSF	NTRK2	PAFAH1B1	PAK1	PAK1	PDE1A	PER2	PGK1	PGM1	PPAP2B	PPP3CB	PRDX1	PRNP	PSMA2	PSMB3	PSMB5	PSMD1	PSMD13	PTN	PTN	PTPRO	PTPRZ1	PVALB	RAGA	RGS4	RPL14	RPN1	RPS3A
X17620	AL038662	X58965	M86707	1161849	AI198311	U55258	AB002341	U55258	U03985	X75958	L13385	U24152	U24152	U40370	AB002345	V00572	M83088	AF017786	M29551	X67951	U29185	D00760	D26598	D29011	D44466	AB009398	M57399	M57399	Z48541	M93426	X63578	U41654	U27768	D87735	Y00281	M84711

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L10333	M25756	AF049498	AF054184	Y00757	AF007216	AF011390	D80000	AF053136	AJ001183	AB018305	M32313	AI636761	300306	X99325	M31303	U77942	AF039945	D50495	X06956	AI310002	J04973	D26068	M92843	AI095508	AF070577

Table 7a: AnCg BP Genetic Ontology

A reserve		
Accession 140.	Gene Name	
	•	26S proteasome
D00762	PSMA3	proteasome (prosome, macropain) subunit, alpha type, 3
D44466	PSMD1	proteasome (prosome, macropain) 263 subunu, non-A1 rase, 1
D00761	PSMB1	proteasome (prosome, macropain) subunit, beta type, 1
D38048	PSMB7	proteasome (prosome, macropain) subunit, beta type, /
D78151	PSMD2	rase,
D29012	PSMB6	proteasome (prosome, macropain) subunit, beta type, 0
D38047	PSMD8	proteasome (prosome, macropain) 26S subunit, non-A1 Fase, o
D26598	PSMB3	proteasome (prosome, macropain) subunit, beta type, 3
D26600	PSMB4	proteasome (prosome, macropain) subunit, beta type, 4
		synaptic transmission
X82068	GRIA3	glutamate receptor, ionotrophic, AMPA 3
D11428	PMP22	peripheral myelin protein 22
AI636761	SST	somatostatin
AA126505	NCAM1	neural cell adhesion molecule l
L10338	SCN1B	sodium channel, voltage-gated, type I, beta polypeptiae
X81438	AMPH	amphiphysin (Stiff-Man syndrome with breast cancer 120kDu uutuutigett)
M19650	CNP	2',3'-cyclic nucleotide 3' phosphodiesterase
L19058	GRIK1	glutamate receptor, ionotropic, katnate l
A1198311	NPY	neuropeptide Y
U68485	BINI	bridging integrator I
M81886	GRIA1	glutamate receptor, ionotropic, AMPA I
Z11695	MAPK1	mitogen-activated protein kinase l
X77748	GRM3	glutamate receptor, metabotropic 3
AF052113	RAB14	RAB14, member RAS oncogene family
U40215	SYN2	synapsin II
U61849	NPTX1	neuronal pentraxin I
		Chaperone
J04988	HSPCB	heat shock 90kDa protein 1, beta
U12595	TRAP1	heat shock protein 75
L12723	HSPA4	heat shock 70kDa protein 4
F08069	DNAJAI	DnaJ (Hsp40) homolog, subjamily A, member i
AL038340	CRYAB	crystallin, alpha B
AL038340	CRYAB	crystallin, alpha B

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X02344	TUBB2	tubulin, beta, 2
AF026166	CCT2	chaperonin containing TCPI, subunit 2 (beta)
M63959	LRPAPI	low density lipoprotein receptor-related protein associated protein l
L26336	HSPA2	heat shock 70kDa protein 2
AF026292	. LIC	chaperonin containing TCP1, subunit 7 (eta)
69080T	DNAJA1	DnaJ (Hsp40) homolog, subfamily A, member 1
AA149486	COX17	COX17 homolog, cytochrome c oxidase assembly protein (yeast)
Y00371	HSPA8	heat shock 70kDa protein 8
X74801	CCT3	chaperonin containing TCPI, subunit 3 (gamma)
		tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein,
X56468	YWHAQ	theta polypeptide
U41816	PFDN4	prefoldin 4
L15189	HSPA9B	heat shock 70kDa protein 9B (mortalin-2)
L26336	HSPA2	heat shock 70kDa protein 2

Table 7b: AnCg MD: Genetic Ontology

		Description	transporter activity	ubiquinol-cytochrome c reductase binding protein	cytochrome c oxidase subunit Vb	ATPase, H+ transporting, lysosomal interacting protein 2	chromosome 4 open reading frame 1	1 ATPase, H+ transporting, lysosomal 70kDa, VI subunit A, isoform l	cytochrome c oxidase subunit Va	solute carrier family I (glial high affinity glutamate transporter), member 2	cytochrome c oxidase subunit VIIb	solute carrier family 4, sodium bicarbonate cotransporter, member 4	solute carrier family 4, sodium bicarbonate cotransporter, member 4	ubiquinol-cytochrome c reductase hinge protein	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit F6	gap junction protein, alpha 1, 43kDa (connexin 43)	solute carrier family I (glial high affinity glutamate transporter), member 3	NADH dehydrogenase (ubiquinone) flavoprotein 1, 51kDa	11 ATPase, H+ transporting, lysosomal 31kDa, VI subunit E isoform l	ATPase, Ca++ transporting, plasma membrane 2
	Gene	Name		UQCRB	COXSB	ATP6IP2	C40rf1	ATP6V1A1	COX5A	SLC1A2	COX7B	SLC4A4	_		1	GJA1	SLC1A3	NDUFV1	ATP6V1E1	ATP2B2
Genbank	Accession	Zo.		T79616	AI526089	AL049929	AF006621	L09235	M22760	1701824	N50520	AF007216	AF011390	AA526497	AA845575	X52947	D26443	AF053070	X76228	X63575

Table 7c: DLPFC BP Genetic Ontology

Genbank		Docomination
Accession No.	Gene Name	
	•	hydrogen ion transporter activity
AA917672	ATP5L	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit g
AI526089	COXSB	cytochrome c oxidase subunit Vb
J04973	UQCRC2	ubiquinol-cytochrome c reductase core protein II
AF050640	NDUFS2	NADH dehydrogenase (ubiquinone) Fe-S protein 2, 49kDa (NADH-coenzyme Q reauctase)
AL049929	ATP6IP2	ATPase, H+ transporting, lysosomal interacting protein 2
AF047181	NDUFB5	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5, 16kDa
AF047436	ATP5J2	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit J, isoJorm 2
D14710	ATP5A1	ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit, isoform 1
U09813	ATP5G3	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit c (subunit 9) isojorm 3
NS0520	COX7B	cytochrome c oxidase subunit VIIb
AF087135	ATP5H	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit a
D89052	ATP6V0B	ATPase, H+ transporting, lysosomal 21kDa, V0 subunit c"
X76228	ATP6V1E1	ATPase, H+ transporting, lysosomal 31kDa, VI subunit E tsoform 1
		Chaperone
U56833	VBP1	von Hippel-Lindau binding protein 1
F08069	DNAJA1	DnaJ (Hsp40) homolog, subfamily A, member 1
AL038340	CRYAB	crystallin, alpha B
AL038340	CRYAB	crystallin, alpha B
X15183	HSPCA	heat shock 90kDa protein 1, alpha
X56468	YWHAQ	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypepulue
L24804	TEBP	unactive progesterone receptor, 23 kD
W28616	HSPCB	heat shock 90kDa protein 1, beta
D49738	CKAP1	cytoskeleton-associated protein 1
AF026166	CCT2	chaperonin containing TCP1, subunit 2 (beta)
M63959	LRPAP1	low density lipoprotein receptor-related protein associated protein 1
X87949	HSPA5	heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa)
L26336	HSPA2	heat shock 70kDa protein 2
M22382	HSPD1	heat shock 60kDa protein 1 (chaperonin)
69080T	DNAJA1	DnaJ (Hsp40) homolog, subfamily A, member 1
AF035316	TUBB	tubulin, beta polypeptide
AI912041	HSPE1	heat shock 10kDa protein 1 (chaperonin 10)
Y00371	HSPA8	heat shock 70kDa protein 8
X74801	CCT3	chaperonin containing TCP1, subunit 3 (gamma)

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X56468 W29042 L15189 X71490 D14710 U09813 AR087135 AR845575 AR845575 AR917672 X83218 D89052 AA917672 AA917772 AA	TWHAQ CIA30 HSPA9B ATP6V0D1 ATP5A1 ATP5A1 ATP5B ATP5B ATP5B ATP5B ATP6V1B1 ATP6V1B1 COX7B NDUFAB1 NDUFAB1 NDUFB3	yrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypeptide CGI-65 protein heat shock 70kDa protein 9B (mortalin-2)  OXPHOS  ATPase, H+ transporting, lysosomal 38kDa, V0 subunit d isoform 1 ATP synthase, H+ transporting, mitochondrial F1 complex, subunit c (subunit 9) isoform 3 ATP synthase, H+ transporting, mitochondrial F0 complex, subunit d ATP synthase, H+ transporting, mitochondrial F0 complex, subunit f ATP synthase, H+ transporting, mitochondrial F0 complex, subunit f ATP synthase, H+ transporting, mitochondrial F0 complex, subunit f ATP synthase, H+ transporting, mitochondrial F0 complex, subunit f ATP synthase, H+ transporting, mitochondrial F1 complex, o subunit ATP synthase, H+ transporting, lysosomal 21kDa, V0 subunit A ATP synthase, H+ transporting, lysosomal 31kDa, V1 subunit E isoform 1 ATP synthase, H+ transporting, lysosomal 31kDa, V1 subunit E isoform 1 Cytochrome c oxidase subunit Vb Cytochrome c oxidase subunit VIIb NADH dehydrogenase (ubiquinone) 1, alpha/beta subcomplex, 1, 8kDa NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5, 16kDa NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5, 16kDa NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5, 16kDa
J04973 L32977	UQCRFS1	ubiquinol-cytochrome c reductase core protein II ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1
U17886	SDHB	succinate dehydrogenase complex, subunit D, 11011 Sultur (1P)

Table 7d: DLPFC MD Genetic Ontology

Genbank Accession No.		
	Gene	
	Name	Description
		transmission of nerve impulse
D11428	PMP22	peripheral myelin protein 22
AF049498	SCN2B	sodium channel, voltage-gated, type II, beta polypeptide
M82919 G	<b>GABRB3</b>	gamma-aminobutyric acid (GABA) A receptor, beta 3
<u> </u> 	GLUL	glutamate-ammonia ligase (glutamine synthase)
-	AMPH	amphiphysin (Stiff-Man syndrome with breast cancer 128kDa autoantigen)
		proteolipid protein 1 (Pelizaeus-Merzbacher disease, spastic paraplegia 2,
M54927	PLP1	uncomplicated)
Z11695	MAPK1	mitogen-activated protein kinase 1
U01824 S	SLC1A2	solute carrier family 1 (glial high affinity glutamate transporter), member 2
M32886	SRI	sorcin
U40215	SYN2	synapsin II
X15376 G	GABRG2	gamma-aminobutyric acid (GABA) A receptor, gamma 2
D26443 S	SLC1A3	solute carrier family 1 (glial high affinity glutamate transporter), member 3
X68194	SYPL	synaptophysin-like protein
<u>U61849</u>	NPTX1	neuronal pentraxin I
		neurogenesis
D11428	PMP22	peripheral myelin protein 22
U30930	UGT8	UDP glycosyltransferase 8 (UDP-galactose ceramide galactosyltransferase)
W28770	NP25	neuronal protein
		proteolipid protein 1 (Pelizaeus-Merzbacher disease, spastic paraplegia 4,
M54927	PLP1	uncomplicated)
D83017	NELL1	NEL-like 1 (chicken)
U34846	AQP4	aquaporin 4
270276	FGF12	fibroblast growth factor 12
M80899	AHNAK	AHNAK nucleoprotein (desmoyokin)
M57399	PTN	pleiotrophin (heparin binding growth factor 8, neurite growtn-promoung lactor 1)
AF016004	<b>GPM6B</b>	glycoprotein M6B
X70326	MLP	MARCKS-like protein
AF036268 \$	SH3GL2	SH3-domain GRB2-like 2
M93426	PTPRZ1	protein tyrosine phosphatase, receptor-type, Z polypeptide 1
U61849	NPTX1	neuronal pentraxin I
M93650	PAX6	paired box gene 6 (aniridia, keratitis)

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		phoenhoric acter hydralase activity
		prosprior care in the care and a second control of the care and a
X55740	NTSE	5'-nucleotidase, ecto (CD73)
AF001601	PON2	paraoxonase 2
X68277	DUSP1	dual specificity phosphatase 1
L35594	ENPP2	ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin)
AB013382	DUSP6	dual specificity phosphatase 6
L05147	DUSP3	dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related)
248541	PTPRO	protein tyrosine phosphatase, receptor type, O
N36638	PPP1R3C	PPP1R3C protein phosphatase 1, regulatory (inhibitor) subunit 3C
AJ001612	PSPHL	phosphoserine phosphatase-like
AF017786	PPAP2B	phosphatidic acid phosphatase type 2B
U60644	EQ74	phospholipase D3
AF056490	PDE8A	phosphodiesterase 8A
M93426	PTPRZ1	PTPRZ1 protein tyrosine phosphatase, receptor-type, Z polypeptide 1

Table 8: Selected Potential Druggable Targets

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Genbank			
Accession	Gene		77
Zo.	Name	Target category	Description
AB020629	ABCA8	transporter	ATP-binding cassette, sub-family A (ABC1), member o
X63575	ATP2B2	transporter	ATPase, Ca++ transporting, plasma membrane 2
X71490	ATP6V0D1	transporter	ATPase, H+ transporting, lysosomal 38KDa, V0 subunit d isotolini i
S74445	CRABP1	transporter	cellular retinoic acid binding protein 1
	, adda	tyrosine kinase	ر ميه يې ميرلېدمهاعدناد اوسالاحسان viral oncogene homolog 3 (avian)
M34309	EKBB3	receptor	Y-ciu-uz civilizatio remeans a Anadoria avarageed kinase keratinocyte growth factor receptor,
		tyrosine kinase	fibroblast growth factor receptor 2 (pacteria-capiessed annuae), accommodified by the fibroblast growth factor receptor 2 (pacterial factor) and factor syndrome)
M80634	FGFR2	receptor	craniofacial dysosiosis 1, Crouzon syndrons, Fronties of the
	644	tyrosine kinase	Ekroblast grouth factor receptor 3 (achondroplasia, thanatophoric dwarfism)
M64347	FGFK3	receptor	Caratein complet recentor family C. group 5, member B
AC004131	GPRCSB	GPCK	O plotein-coupled receptor, rains) of 8-17
		ligand for cell	
201022	T ANGD?	adhesion molecule	lysosomal-associated membrane protein 2
A//190	LAIVIF 2	ramilator of	
1137122	ADD3	kinase	adducin 3 (gamma)
		regulator of	
048990	BAD	protease	BCL2-antagonist of cell death
		regulator of	. The continuities arotain 1
AB007943	RAPIGAI	kinase	KAPI, GIPase activating protein 1
7,000,001	UCSJa	regulator of	regulator of G-protein signalling 20
AFU0U8//	ROSZO	O I I asc	
AL049538	RIN2	regulator or GTPase	Ras and Rab interactor 2
		reuglator of	
		protein	
U58334	TP53BP2	degradation	tumor protein p53 binding protein, 2
		regulator of	
U28964	YWHAZ	enzyme	tyrosine 3-monooxygenase/tryptopitati 3-titottooxygentase acti actions actions and a second actions are a second actions at the second actions at the second actions are a second actions at the second actions at the second actions are a second actions at the second actions at the second action actions are a second actions at the second actions at the second actions are a second actions at the second actions at the second action act
J04046	CALM3	kinase	calmodulin 3 (phosphorylase kinase, delta)
AF112471	CAMK2B	kinase	calcium/calmodulin-dependent protein kinase (Calvi kinase) 11 Octa
	1 800	regulator of	ui vito
D50310	CCN	Kinase	Cyclin 1
U37143	CYP2J2	monooxygenase	Cytochrome P450, taining 2, successing 5; Perfect

Jable 8, cont'y

AB006626	HDAC4	enzyme	histone deacetylase 4
X57206	ITPKB	kinase	inositol 1,4,5-trisphosphate 3-kinase B
M12267	OAT	enzyme	ornithine aminotransferase (gyrate atrophy)
Y10275	PSPH	enzyme	phosphoserine phosphatase
AJ001612	PSPHL	enzyme	phosphoserine phosphatase-like
AL080061	CLIC4	channel	chloride intracellular channel 4
L08485	GABRAS	channel	gamma-aminobutyric acid (GABA) A receptor, alpha 2
AF016917	GABRD	channel	gamma-aminobutyric acid (GABA) A receptor, delta
		regulator of	
L19182	IGFBP7	receptor ligand	insulin-like growth factor binding protein 7
M29273	MAG	myelination	myelin associated glycoprotein
X76220	MAL	myelination	mal, T-cell differentiation protein
		signal	
Z24725	MIG2	transduction	mitogen inducible 2
		partner for	
		calmodulin-like	
AB018342	MYO10	protein	myosin X
		axon growth	
AB018305	SPON1	guidance	spondin 1, (f-spondin) extracellular matrix protein